

NOTES ON SOME SPECIES RECORDED FOR THE CAPE PENINSULA.—I.

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In the list of the Peninsula Flora published by Bolus and Wolley-Dod (Trans. S. Af. Phil. Soc. XIV, 207-372, 1903), there are records for a number of plants that have not been collected in recent years. These records, together with some published since, are of some importance in relation to possible changes in the flora in an area with increasing population and a rapidly enlarging area of building and cultivation. The records are not all of the same kind. In some the apparent absence of the plant now may mean actual disappearance or very much reduced frequency of occurrence. The habitats of some species have been very much reduced. Areas such as Paarden Island or Green Point Common which possess a number of species not found elsewhere within the area are at present threatened by very severe alteration if not complete destruction of the habitats. Lakeside Vlei is also liable to large alterations. These are changes threatened or taking place but as great alterations have occurred in the past.

Other records are the result either of misidentification or in the case of some of the older ones of possible mistakes or uncertainties in the localities. Most of the older records which were rejected by Bolus and Wolley-Dod are not included here unless there is some special reason for so doing.

Any further information concerning any of these missing species will be gladly received.

Potamogeton pusillus L. This plant has not been seen here since it was collected by Ecklon. It is not in the List.

Zostera nana Roth was found by the late C. E. Moss in the channel connecting Lakeside Vlei with the sea about 12 years ago. The channel has since been canalised and the plant seems to have disappeared.

Aponogeton crinifolius Lehm. ex A. Benn. This is recorded in Flor. Cap. (VII 45, 1897), on the strength of a single specimen collected by Pappe on the Cape Flats. The specimen in Herb. Brit. Mus. is a very poor one but appears to be a deep water form of *A. angustifolius* which has no expanded blade to the leaf.

Prionanthium pholiuroides Stapf. This distinct endemic annual was

discovered by Wolley-Dod (3894 in Herb. Kew), on damp sandy flats near Fish Hoek. It has not been collected again. The locality has been very much altered by building and grazing and it may be lost.

Helictotrichum quinquesetum (Steud.) Schweich. This species rests on a collection by Ecklon from the top of Table Mountain. It has not been seen there or anywhere else since. Specimens of *H. longum* (Stapf) Schweich. may have additional bristles on the side lobes of the lemma.

Danthonia lupulina R. & S. In the List (359) this is recorded on collections by Ecklon at Doornhoogte and by Spilhaus on Table Mountain. The species is closely allied to *D. lanata* R. & S. and possibly might be passed over for that. While specimens of really characteristic *D. lupulina* have not been found, some that are intermediate between the two have been found on Constantiaberg. It is possible that *D. lupulina* is an extreme form of a line of variation of *D. lanata*.

D. curva Nees. This is included in the List (359) on the strength of a specimen collected by Verreaux. This is in Herb. Kew and is labelled "Prom. b. sp. ad Montem Diaboli." The species has an eastern distribution and has not otherwise been collected at all in the S.W. Cape. It is possible that the "Mons Diaboli" refers to some other than that by Table Mountain. Unless some confirmation is obtainable the species cannot be regarded as a Peninsula one.

Ehrharta Dodii Stapf. Found once near the top of Constantiaberg (Wolley-Dod 1961). It is a distinct species and one that needs to be searched for. It is based on this one collecting.

Eragrostis aspera Nees. Recorded in the List (360) as "near Cape Town" by Spilhaus. It has not been seen recently, nor have any localised specimens been seen. It was either a temporary casual or a mistake.

Lamarckia aurea Moench is recorded in the List as frequent near Simonstown. It is a conspicuous species but has not been collected since and appears to have been a temporary casual.

Juncus Sprengelii Nees. The only collection is that by Ecklon and Zeyher from Camps Bay. Much searching has failed to reveal it in recent years.

Urtica dioica L. Recorded in the List (319) with doubt. The plants concerned are *U. membranacea* Poir. which occurs occasionally on the lower mountain slopes above Cape Town.

Cerastium Dregeanum Fenzl. This species has been recorded by various collectors from the Peninsula (List 238). Specimens so named are Wolley-Dod 92, 3503 from Orange Kloof; L. Bolus from the same locality; Wolley-Dod 2099 from Tokai; and others. None of these however is the real *C. Dregeanum* which has not been found anywhere in the S.W. Cape. All belong to a variety of *C. capense* Sond. distinguished by the

larger flowers with petals as long as or longer than the sepals, petals with diverging not parallel lobes, ovary at opening of the flower rounded and flattened on top with styles as long as itself. The flower opens more fully than in the common form and the fruit is always pendent. The variety is a new one and may be characterized as follows :

C. capense var. *australe* var. nov. A typo differt, statu saepius majore, floribus majoribus subpendulis, petalis sepala aequantibus vel paullo superantibus bifidis lobis subdivaricatis sinu lato, ovario rotundo apice plus minusve plano, stylis longis ovario longioribus, fructibus majoribus pendulis.

Sandy soils on mountains, rare below 1,500 ft. Table Mountain, Noordhoek Mts. etc. Occurs outside the Peninsula on mountains on the coast belt eastwards to the Stormberg. The type is Adamson 767 in Herb. Bolus.

Melandrium. In the List 4 species are recorded that would be placed here ; these are *Silene capensis* Otth., *S. undulata* Ait., *S. ornata* Ait., and *Lychnis dioica* L. Of these the second *M. undulatum* (Ait) Rohrb. presents no difficulty. *M. capense* (Otth. ex DC) Rohrb. is a rather critical species not well distinguished from the above. There is a plant in the eastern and northern districts distinguished by the more erect habit, narrow leaves, long stalked flowers with narrow tubular calyx, and fruit clavate but very little widened upwards. The gynophore is as long as or longer than the narrow capsule. This is the plant that has most often been referred to *M. capense* ; it is one that has not been found on the Peninsula at all. The notes on the species in the List (237) seem really to refer to *M. ornatum*. There has been some confusion about *M. ornatum* (Ait.) Aschers. largely owing to the restriction of the name to plants with dark coloured flowers. The dark red flowered plant is the one which has been cultivated and the one figured in Bot. Mag. (t.382). There is found on the Cape Flats and elsewhere at low altitudes, not uncommonly, a plant in every way agreeing with *M. ornatum* except for the pale pink flowers ; e.g. Schlechter 1275, Levyns 5887, Adamson 1192, 2155, 2219, and outside the Peninsula, Bolus 12613B.

As plants identical with *M. undulatum* may have dark flowers (Harvey 231), the colour cannot be looked upon as in any way a diagnostic feature. It seems most probable that Schlechter's record of *Lychnis dioica* from the Cape Flats is really this pale flowered form of *M. ornatum*. The original specimens have not been seen, but repeated search has not given any evidence for any other species.

Ranunculus sceleratus L. In the List (232) this is included on a single specimen. It has not been found since and if correctly identified seems to have been a temporary casual.

Gymnosporia Schlechteri Loes. This rests on a single gathering (Schlechter 241) from Constantiaberg. It has not been found again. It is allied a *G. polyacantha* Szysz., a species of definitely eastern distribution. The species is not mentioned by Davison (Bothalia II 289. 1927).

Pterocelastrus rostratus (Thunb.) Walp. The only record is Pappe "ravines on eastern side of Table Mountain". No recent gathering has been made. Davison (l.c. 322) does not give any Peninsula records. The plant is a distinct one that may be still to be found in some of the less accessible kloofs.

Cassine papillosa Kuntze. The only record for this species on the Peninsula is a plant collected by Marloth in Orange Kloof which is quoted by Davison (l.c. 335). This specimen, Marloth 3426, is in Herb. Bolus and is mounted on the same sheet as an undoubted specimen of *C. papillosa*. Marloth 3426 is a fruiting twig with a round not elliptical fruit and leaves without the looping veins. The specimen agrees in every way with *Hartogia capensis* and should certainly be referred to that. *C. papillosa* must be eliminated from the list.

Maurocena Schinziana Loes. was described from specimens collected "near Hout Bay," Schlechter 960. It is a critical species very closely similar to *M. Frangularia* Mill. but differing in the ovules being basal not pendent. On this character L. Bolus (Ann. Bol. Herb. I. 182. 1915) transferred the species to *Cassine*. The type specimen has not been seen but from the description (Bull. Herb. Bois. II. 194. 1894) the position of the ovules is the only differentiating character. The other features mentioned are all to be found in specimens of *M. Frangularia*. An examination of a number of these and especially of those with leaf characters agreeing with Loesing's description of his species has failed to reveal any with basal ovules.

Lauridia reticulata E. & Z. The record for this plant rests on Rehmann "Stinkwater near Cape Town." Repeated searching has failed to confirm its occurrence. The species is otherwise one with an eastern distribution and not likely to occur here.

Malvastrum albens Harv. Recorded in the List (239) for "Rondebosch." It has not been collected at all recently. While it occurs outside the area it may have disappeared within owing to building.

Hermannia flammea Jacq. The records quoted in the List (239) almost certainly refer to *H. rudis* N.E. Br. which is common but was not regarded as separate at the time they were made.

H. lavendulifolia L. The last collecting of this species was by Ecklon and Zeyher on "Flats near Salt River." It is a distinct species not likely

to have been overlooked and seems to have disappeared with the spread of Cape Town.

Bergia glomerata L.f. is another plant that seems to have disappeared.

Centella (*Hydrocotyle*) *septemloba* Schinz described from specimens collected on Constantiaberg, Schlechter 878, is very closely allied to *C. hederifolia* (Burch.) Drude and only differs in having woolly fruits. The leaf characters are not constant. It cannot be maintained as a separate species.

C. hermannifolia E. & Z. has no real claim to be included in the flora. Specimens so named from Peninsula localities, e.g. Rehmann 1361, are forms of *C. capensis* (L.) Domin with leaves more deeply cut than is usual.

Hermas gigantea L.f. Sonder's records quoted in the List (272) refer to *H. Pillansii* Norman. There is no reason to suppose that *H. gigantea* occurred at all on the Peninsula.

H. quinquedentata L.f. Recorded for "Top of Table Mountain" by Thunberg. It has not been found since and the record probably refers to a small plant of *H. capitata*. *H. quinquedentata* differs in the cuneate leaves and shorter fewer leaved involucre; the characters of petiole length and leaf position given by Sonder are not constant.

Seseli asperum (Thunb.) Sond. Sonder's description was based on a specimen collected by Zeyher now in Herb. Mus. Nat. Hist. Stockholm. Examination shows that this is the plant generally known as *Sonderina hispida* (Thunb.) Wolff (*Ptychotis hispida* Sond) though a rather glabrous form of that species. Thunberg's original description of *Sium asperum* is too short for any certainty. The specimens in his herbarium are poor but seem to be rather luxuriant plants of *Sonderina hispida*. *Seseli asperum* thus is the same as *Sonderina hispida*. The name "*hispida*" can stand as Thunberg published his *Sium hispidum* and *S. asperum* at the same time.

Schlechterosciadium gracillimum Wolff. This was described (Fedde Rep. XVII. 154. 1921) from specimens collected by Schlechter on the Simonstown Mountains at 1,000 ft. The type specimen, Schlechter 321, has not been seen but in Herb. Bolus there is a sheet, Schlechter 331, collected in the same place at the same time. This is a small plant with a somewhat swollen underground portion. The leaves are exactly like the first ones produced by *Chamarea capensis* (Thunb.) E. & Z. In that plant leaves of this kind wither early and are followed by larger ones with much narrower segments. These also wither before the flowering period. The inflorescence and fruit are also closely similar to those of *C. capensis* except for the small size. The plant seems best regarded as a starved and precocious state of *C. capensis* in which flowers

occur with the juvenile leaves. It is worthy of note that in his later monograph Wolff (Pflanzenr. IV. 228: 173. 1927) quotes Schlechter 321 under *C. capensis* but does not mention his earlier species.

Peucedanum abbreviatum E. Mey. The record rests on collections of Krauss. The species is a distinct one with an eastern distribution and one not at all likely to be found on the Peninsula. Most probably the locality alleged is incorrect.

Royena hirsuta L. The records for this species (Flor. Cap. IV. 1; 452. 1906) refer to localities outside the area. It has never been gathered on the Peninsula.

Wahlenbergia subpilosa von Brehm. This is recorded as *W. paniculata* A. DC. in the List (292) and as *W. paniculata* var. *glabrata* Sond. in Flor. Cap. II. 575. 1855. It is an annual on sandy flats which has not been collected for many years and is possibly now extinct within the area.

W. saxifragoides von Brehm. This is based upon Bolus 7107 which is the only collecting. It was found at Kenilworth growing among *W. procumbens*. It is very closely allied to that species and though distinct in some features can hardly be looked upon as more than a state of that unless more material is found.

W. filicaulis Good is a state of *Prismatocarpus sessilis*.

Lightfootia rubens Buek was recorded by Harvey "near Cape Town" and *L. Thunbergiana* Buek by Drège "between Hout Bay and Wynberg." Neither has been collected again. *L. rubens* is a plant of the eastern Cape, and *L. Thunbergiana* of the northern west coast. Both records seem to be mistakes either in identification or in labelling.

Laurentia bifida Sond. In the List (290) this was included with doubt on the basis of a plant found on Steenberg, Wolley-Dod 1292. This is in Herb. Bolus and is most like a small state of *L. arabidea* DC.

Isolobus corymbosus (Presl) A. DC. (*Lobelia corymbosa* Grah. in List). The inclusion of this as a Peninsula plant rests on Bolus 3858 collected on the Kalk Bay Mountains. The specimen is, however, misidentified and is *I. Ecklonianus* var. *spathulatus* (Good) Adamson.

Lobelia linearis Thunb. The last records are Ecklon and Zeyher from Doornhoogte and MacOwan 2929 from Maitland. It has not been seen since, and may well be now extinct within the area. Specimens from Kenilworth Race Course which seem distinct from *L. setacea* and which have been named as this species are not so.